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Abstract

The higher education institutions decided to work on the creation of a general competencies framework that allows their graduates to meet the requirements of the global labor market, adapting to the Tuning project created in Europe and adapted in Latin America. Being it an independent project that aims to establish reference points, convergences, and mutual understanding, according to certain generic and specific competencies. This research seeks to determine if the foreign trade and international business programs of the Escolme University Institution have developed the competencies established in the Latin-America Tuning Project proposal. The methodology applied is based on a quantitative approach through a case study in which all the students of these programs participated. Among the results, there is a low development of competencies allowing us to conclude that both the participants of technology in foreign trade and those of professionalization of international businesses do not comply with the generic competencies defined by the Tuning Latin America Project.

Keywords: competencies; evaluation; tuning project; global markets

Resumen

Las instituciones de educación superior decidieron trabajar en la creación de un marco general de competencias que permita a sus graduados cumplir con los requisitos del mercado laboral global, adaptándose al proyecto Tuning creado en Europa y adecuado en América Latina, siendo este un proyecto independiente que pretende establecer puntos de referencia, convergencias y una comprensión mutua, según ciertas competencias genéricas y específicas. El objetivo de esta investigación es determinar si los programas de comercio exterior y negocios internacionales de la Institución Universitaria Escolme, han desarrollado las competencias establecidas en la propuesta de Latin-America Tuning Project. La metodología aplicada se basa en un enfoque cuantitativo, a través de un estudio de caso en al que participaron todos los estudiantes de estos programas. Entre los resultados, se observa un bajo desarrollo de las competencias permitiendo concluir que tanto los participantes de tecnología en comercio exterior, como los de profesionalización de negocios internacionales, no cumplen con las competencias genéricas definidas por el Proyecto Tuning Latinoamérica.

Palabras clave: Competencias; evaluación; proyecto tuning; mercados globales
Introduction

The Tuning project is an independent project, promoted and coordinated by universities from different countries, both European and Latin Americans that intends to set benchmarks, convergence and mutual understanding, according to certain generic and specific competencies. This process begins in May 1998 when the Ministers of Education from France, Italy, The United Kingdom, and Germany, signed in Paris the Sorbonne Declaration on “the harmonization of the structures of the European Higher Education System” (Gonzalez & Wagenaar, 2003).

In June 1999, the Education Ministers of 30 states of the European Union (EU) signed the Bologna Declaration, picking up the main lines of the Sorbonne Declaration, proposing the establishment of a European Higher Education Area (EHEA) by 2010, which would allow the knowledge society innovations and changes in traditional forms of training, production, communication of information and access to public and private services (Salaburu et al, 2011).

The European Higher Education Area (EHEA) is a teaching model where the student becomes the educational system center as a major actor of the same. Also, it allows easier recognition of qualifications and ensure optimal training of students and their integration in an unified labor market without borders, which is increasingly demanding (EHEA, 2015).

Tuning Latin America and Colombia

Since 2004 the version of the European Tuning project has been applied in Latin America, with the name of Latin America Tuning Project, based on the results derived from the Europe Tuning project, known as "Tuning Educational Structures in Europe" (Gonzalez, et al., 2004 pp. 154-164).

The National Education Ministry of Colombia has embarked on common benchmarks as part of its strategies to ensure the quality of education in the country as well as the articulation of the different levels of education: preschool, primary, secondary and higher, and formulate common references to ensure quality education for all children and youth in the country, regardless of region or nature of educational provision (public or private).

With these common references, it is intended: (a) direct incorporation into all curricula of knowledge, skills, and values required for citizens and productive performance on equal terms; (b) ensure access of all students to this learning; (c) maintaining essential elements of national unity.
in the context of growing decentralization; (d) comparability with what students learn in other countries, and(e) facilitate the transfer of students between schools, regions, and countries (Peña, 2010).

The twenty competencies in Colombia were classified according to the Education Ministry: (i) which are involved in the learning process, (ii) Social values, (iii) the international technological context and (iv) interpersonal skills (Ministerio de Educación, (ME) 2009).

**Dynamics of education based on competencies**

The competencies involve a number of capabilities, that must be developed through different dynamics and strategies throughout the training process of students (Aristimuño, 2004). For this reason, the university today, must be increasingly centered on the student's attention as a person that is built into the process of professional learning, humanistic education of competent and committed to social development, professionals should be for this new training a concern and a cause of that deal (Maura & Lying, 2008).

This framework, must be regarded as a skills approach to education and not as a pedagogical model because it does not intend to be an ideal representation of the entire educational process, determining how should be the kind of person to become, the instructional process, the developer process, the curriculum design, the teaching concept he epistemological conception and the type of teaching strategies to be implemented (Tobón, 2008). However it is presented as a set of features necessary for performance in specific contexts that makes available knowledge, skills and abilities required to practice a profession or occupation (Álvarez, 2004).

Thus, the new generations, must be prepared with new skills, knowledge and ideals to build the future. So that higher education, including their challenges facing the training based on the skills and relevance of curricula that are constantly adapted to the present and future needs of society for which requires better articulation with the problems of society and the world of work (UNESCO, 1998 cited in Ramírez & Medina, 2008).

**Tuning project and International Trade area**

The Tuning project has focused on 7 areas: business administration, education sciences, geology, history, mathematics, physics, and chemistry. Unfortunately have not found studies related to International Trade; therefore, with this project, we pretend to compare the curriculum of the programs Technology in Foreign Trade and Professional Cycle in International Business.
from the Institution University Escolme, with the competencies guidelines for the Colombia Tuning project. Furthermore, with this research, we want to know if the competencies laid down are sufficient to evaluate the international trade area or adaptations should be made.

**Methodology of Research**

The research is based on a quantitative approach to the problem situation that gives rise to this study, for which was analyzed through a study case, if the descriptive cards of the subjects of the program’s Technology in Foreign Trade and Professional Cycle in International Business from the Institution University Escolme, develop the skills proposed by the Tuning project for Latin America (2004-2006) and the Education Ministry of Colombia (2007). As for the research sample, census surveys were applied as an instrument to the total student population of Technology in Foreign Trade and Professional Cycle in International Business. The research design is performed quantitatively in order to find the percentage of compliance with the competencies by applying the following:

- The powers of the descriptive letters of the subjects of Technology in Foreign Trade (within the knowing, being, doing, and coexistence) are evaluated and compared against each of the 27 generic competencies of Latin America Tuning 2011-2013.

- The evaluation data are entered into a matrix where the powers of the descriptive letters that meet against the powers of the Tuning Project are identified, in each of the 41 subjects of Technology in Foreign Trade.

- The finished matrix allows to obtaining the number of times that is present each of the powers of the descriptive letter in each subject, and its percentage of compliance.

- Each subject is consolidated with percentages of compliance with each of the four competencies of descriptive letters to express the percentage of compliance with each subject against Project Tuning competencies.

- It is taken as an evaluation criterion compliance on scales from 0% to 100%, determined as follows: 0% - 24% descriptive letters of these subjects should be modified in their entirety because they do not meet the generic skills of Tuning, 25% - 50% descriptive letters of these subjects should be analyzed by deanship because these comply with the minimum expected in the analysis against the Tuning generic, 51% - 75% descriptive letters of these subjects should be adjusted in the contents of the competencies knowing, being, doing or coexistence because they
meet acceptably with Tuning competencies and, 76% - 100% descriptive letters of these subjects meet Tuning generic competencies and therefore should also be taken as a sign to develop the work in other subjects that are on a different scale.

- With the resulting classification, the number of subjects that meet Tuning Project competencies and which should be reformed is identified.

- As a result, a percentage that measure the Tuning Project competencies in Technology in Foreign Trade and Professional Cycle in International Business from the Institution University Escolme is obtained.

**Results of research and discussion**

In the preliminary analysis results made to descriptive letters and, information collected on instrument developed for this purpose, programs Technology in Foreign Trade and Professional Cycle in International Business from the University Institution Escolme, it was determined that, in the subjects, there is low development of generic competencies proposed by the Tuning project for Latin America (2011-2013); being able to observe that the 27 competencies defined is not explicitly embedded or implied in the descriptive letters and that the institution and teachers who developed descriptive letters did not consider the Tuning generic competencies within the pillars of education agreed by the Ministry of Education of Colombia (learning to know, learning to be, learning to do and learning coexistence).

Four ranges of compliance with the competencies of the Institution University Escolme were determined, compared to generic competencies of Tuning project for Latin America. These ranges indicated percentages of compliance with each of the descriptive cards of the subjects of the program’s Technology in Foreign Trade and International Business Professional Cycle, in terms of analysis skills in knowing, being, doing and living.
**Table 1**

*Tuning project competencies present in the descriptive cards the technology in Foreign Trade program from the University Institution Escolme.*

<table>
<thead>
<tr>
<th>Rank of Enforcement competencies</th>
<th>Recommendation</th>
<th>Technology</th>
<th>Professionalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% - 24% compliance with the competencies</td>
<td>The descriptive letter of these subjects should be amended in its entirety because it fails</td>
<td>4 3 4 9 18 16 15 16</td>
<td></td>
</tr>
<tr>
<td>De 25% - 50% compliance with the competencies</td>
<td>The descriptive letters of these subjects must be analyzed by deanship because they meet the minimum expected in the analysis. In the descriptive cards of these subjects must fit the contents of the competencies to know, to be, to do or coexistence because they meet acceptable with Tuning skills</td>
<td>8 18 6 13 7 10 8 6</td>
<td></td>
</tr>
<tr>
<td>De 51% - 75% compliance with the competencies</td>
<td></td>
<td>11 5 12 5 2 1 4 4</td>
<td></td>
</tr>
<tr>
<td>De 76% - 100% compliance with the competencies</td>
<td>The descriptive letters of these subjects meet generic Tuning skills</td>
<td>4 1 5 0 0 0 0 1</td>
<td></td>
</tr>
<tr>
<td>Total Competencies</td>
<td></td>
<td>27 27 27 27 27 27 27 27</td>
<td></td>
</tr>
</tbody>
</table>

The results obtained and shown in Table 1 indicated that the descriptive cards of the programs analyzed Technology in Foreign Trade and Professional Cycle in International Business, not comply with what is required in the Tuning project for Latin America 2011-2013. Additionally, and descriptive letters should be adjusted in their content to the competencies of knowing, being, doing and living, and having these programs set to the Tuning project and the pillars of education agreed by the Ministry of Education of Colombia.

It showed that the descriptive letters that ranked on a percentage of acceptability of 76% - 100% are minimal and, that even belonging to this range should be adjusted, because all the competencies of the Tuning project are not met in the descriptive cards determined by the Institution University Escolme within the knowing, being, doing and living.

Tuning Latin America has identified 27 generic competencies which have grouped according to affinity, on four factors: Learning Process, Social Values, International Technological Context,
and Interpersonal Skills. For the definition of these competencies, each National Tuning Centre, CNT, in each country, presented a list of generic skills, taking as a starting point the 30 competencies that defined the European Tuning. Validation was conducted through a survey conducted by universities, by which it was established that for all groups consulted the definition of a university degree should consider these 27 generic competencies (Ministry of Education, 2009). Colombia once determined generic group competencies tuning for Latin America 2011-2013 in these particular groups were classified as follows:

Learning Process
- Capacity for abstraction, analysis, and synthesis
- Ability to apply knowledge in practice
- Ability to organize and plan time
- Knowledge of the area of study and profession
- Social responsibility and civic engagement
- Oral and written communication skills
- Ability to communicate in a second language
- Skills in the use of information technology and communication
- Research capacity

Social Values
- Ability to learn and continually updated
- Ability to search, process, and analyze information from various sources
- Critical and self-critical Ability
- Ability to act in new situations
- Creative Ability
- Ability to identify, formulate and solve problems
- Ability to make decisions
- Capacity for teamwork.

Interpersonal skills
- Interpersonal skills
- Ability to motivate and work towards common goals
- Commitment to environmental preservation
- Commitment to the socio-cultural environment
- Value and respect for diversity and multiculturalism
- Ability to work in international contexts
- Ability to work autonomously
- Ability to formulate and manage projects
- Ethical commitment
- Commitment to Quality

In its project The Institution University Escolme performed the analysis of these competencies grouped in descriptive cards of all programs belonging to the faculty of international to provide the following results (see Table 2).

Table 2

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Total</th>
<th>0% - 24% Competencies</th>
<th>25% - 50% Competencies</th>
<th>51% - 75% Competencies</th>
<th>76% - 100% Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competencies for the learning process</td>
<td>70</td>
<td>30</td>
<td>23</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>Competencies for social values</td>
<td>56</td>
<td>19</td>
<td>17</td>
<td>17</td>
<td>3</td>
</tr>
<tr>
<td>Competencies for interpersonal skills</td>
<td>82</td>
<td>39</td>
<td>25</td>
<td>15</td>
<td>3</td>
</tr>
</tbody>
</table>

In competitions classified as social values (see Table 2), it is evident that the descriptive letters of 19 subjects should be modified in full, and only 3 descriptive letters meet the Tuning competencies. Against this, the Institution University Escolme should strengthen generic competencies relate to social values and provide appropriate instructions for teachers to refer to them and forming students. To become aware of the social. The results obtained for this analysis indicate that the Institution University Escolme should strengthen training in the social as an integral part of training in the specifics because it forms an integral professional for the world.

In competitions classified as interpersonal skills (see Table 2), it is evident that the descriptive letters of 39 subjects should be modified in full, and only 3 descriptive letters meet Tuning competencies. To the Institution University Escolme intention is to form integral professionals for the world to support and take appropriate decisions; therefore, the institution must
make the necessary changes in their descriptive letters of these competencies grouped in interpersonal training. So these would be evidenced and can be seen reflected in the professional, providing visibility to the international business environment. In addition, the Institution University Escolme, will be helped to start this revolution based on the Tuning competencies. Thus because new professionals, who graduate from their technical and professional programs, will see the world differently, get these basic skills in their training process, and may interact differently in their professional work. Furthermore, training that can be applied in other institutions and the rise of new applicants understand that the Institution University Escolme provides skills training that a global market requires.

In competitions classified as learning processes (see Table 2), it is evident that the descriptive letters of 30 subjects should be changed entirely, and just 5 descriptive letters meet the Tuning competencies, which should be taken as referring to change the others descriptive letters grouped in competencies as a learning process. This implies that ESCOLME should begin to perform work in their descriptive letters where from its implementation letters have all the necessary components to be in line with the Tuning project for Latin America; that is, descriptive letters are far from being descriptive letters that impart and promote the competencies of the Tuning project for Latin America in the technological and professional programs, so that students and graduates are formed not only in the specific knowledge but with the skills that have been identified as necessary or generic to be more competitive in professional work.

It is then determined that the Institution University Escolme and faculty of International Business, with its programs Technology in Foreign Trade and Professional Cycle in International Business, must adjust their descriptive letters in the vast majority of his subjects in order to begin a process of international competitions evolution and growth of their technological and professional programs. It is important to note that this process will be an important change for the faculty, because it can have more strengthened international guidelines programs, guided by the Tuning project to Latin America and accepted by the Ministry of Education of Colombia.

Table 3 shows that the labor observatory, in 2013 employer survey, identifies 15 competencies required of graduates. These competencies match generic competencies identified by the Tuning project for Latin America 2011-2013 and, International Business Faculty of the Institution University Escolme, has begun to follow that path to suit the Tuning project through a project developed by researchers at the faculty of international business.
### Table 3

Competence of graduates / Colombia labor observatory

<table>
<thead>
<tr>
<th>Competence</th>
<th>Level of Importance</th>
<th>Level of achievement</th>
<th>Gap importance - achievement</th>
<th>Tuning generic competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply values and professional ethic in work performance</td>
<td>98,3%</td>
<td>97,6%</td>
<td>0,7%</td>
<td>26</td>
</tr>
<tr>
<td>Assume a coexistence culture</td>
<td>98,2%</td>
<td>97,0%</td>
<td>1,2%</td>
<td>22</td>
</tr>
<tr>
<td>Teamwork to reach common goals</td>
<td>97,9%</td>
<td>96,8%</td>
<td>1,1%</td>
<td>17</td>
</tr>
<tr>
<td>Cleanliness in orally communication</td>
<td>97,7%</td>
<td>95,7%</td>
<td>2,0%</td>
<td>6</td>
</tr>
<tr>
<td>Use computing basic tools</td>
<td>97,7%</td>
<td>96,7%</td>
<td>1,0%</td>
<td>8</td>
</tr>
<tr>
<td>Identify, pose and solve problems</td>
<td>97,6%</td>
<td>94,9%</td>
<td>2,7%</td>
<td>15</td>
</tr>
<tr>
<td>Plan and use time effectively so that the objectives are achieved</td>
<td>97,4%</td>
<td>94,9%</td>
<td>2,5%</td>
<td>3</td>
</tr>
<tr>
<td>Adapting to change</td>
<td>97,0%</td>
<td>95,6%</td>
<td>1,4%</td>
<td>13</td>
</tr>
<tr>
<td>Understand the reality around him</td>
<td>96,5%</td>
<td>95,1%</td>
<td>1,4%</td>
<td>1</td>
</tr>
<tr>
<td>Capacity for abstraction, analysis and synthesis</td>
<td>95,6%</td>
<td>93,0%</td>
<td>2,6%</td>
<td>1</td>
</tr>
<tr>
<td>Be creative and innovative</td>
<td>95,6%</td>
<td>93,6%</td>
<td>2,0%</td>
<td>14</td>
</tr>
<tr>
<td>Ability to generate and develop creative ideas for the development of opportunities for improvement in the company</td>
<td>95,5%</td>
<td>92,5%</td>
<td>3,0%</td>
<td>16</td>
</tr>
<tr>
<td>Identify opportunities and resources in the environment</td>
<td>95,4%</td>
<td>92,7%</td>
<td>2,7%</td>
<td>25</td>
</tr>
<tr>
<td>Search, analyze, manage and share information</td>
<td>95,0%</td>
<td>93,5%</td>
<td>1,5%</td>
<td>11</td>
</tr>
<tr>
<td>Being able to take risks</td>
<td>92,3%</td>
<td>89,0%</td>
<td>3,3%</td>
<td>16</td>
</tr>
</tbody>
</table>

**Nota**: Adapted from (GCOL, 2015).

At the international level, now, one of the highlights in higher education is the development and improvement of skills in students of all careers. These skills influence the future work of professionals. In a way, it also becomes one of the success factors for graduates, why, ten years ago universities in the world have begun to work in the direction of developing them. Not only is it about training students in the knowledge of each profession and develops some competencies, which previously was thought they were acquired in primary or secondary education, or even in labor organizations in which they work. Therefore, it is worth noting that generic competencies...
developed in higher education will accompany the student life in performance that they would have on society.

Conclusions

After analyzing the 27 generic competencies of Tuning Project for Latin America with the descriptive cards of the program’s Technology in Foreign Trade and Professional Cycle in International Business from the Institution University Escolme, we concluded that these competencies are sufficient to verify the pertinence of these programs with Tuning project competencies.

However, according to the results, we can say that neither Technology in Foreign Trade, and International Business Professionalization meet generic competencies defined by the Tuning Latin America Project 2011- 2013. It is important to clarify that the Tuning Project has not been sufficiently disseminated by the Colombian Ministry of Education, and there are no regulations as required.

The Tuning Project is an initiative of universities for universities, for this reason, the institutions should create a space for reflection, discussion and debate, where students, teachers, and administrators from the same institution are participating, with the aim of defining key aspects that contribute to creating based on the competencies defined by the Tuning Project Latin America 2011 - 2013.

The implementation of competency-based training demands a radical change in the paradigms of teaching and learning, on the way to teaching, the organization of educational structures, educational thinking, and in vocational training schemes.

An educational model based on skills development, promotes communication between higher education institutions and facilitates the mobility of teachers and students globally, facilitating the performance of his professional career in any part of the world.

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Evaluation of compatibility of the generic competencies defined for Latin-American Tuning Project (2011-2013): a case study
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